DOCUMENT RESUME

ED 422 836 IR 018 977

AUTHOR Adams, Kate; Bicknell-Holmes, Tracy; Latta, Gail F.
TITLE Supporting Distance Learners and Academic Faculty Teaching at a Distance.
PUB DATE 1998-00-00
NOTE 7p.; In: Distance Learning '98. Proceedings of the Annual Conference on Distance Teaching & Learning (14th, Madison, WI, August 5-7, 1998); see IR 018 976.
PUB TYPE Reports - Descriptive (141) -- Speeches/Meeting Papers (150)
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Academic Libraries; *Access to Information; *Coordinators; Curriculum Development; *Distance Education; Document Delivery; Faculty Development; Higher Education; *Independent Study; Information Systems; Information Technology; Library Role; *Library Services; Student Needs; Technological Advancement; User Needs (Information); World Wide Web
IDENTIFIERS *Technology Utilization; University of Nebraska Lincoln

ABSTRACT

There are three challenges academic institutions must address in order to achieve the goal of ensuring that distant students are afforded the opportunities of independent learning: (1) academic libraries must effectively utilize technology to make the information resources in their research collections accessible to distant students; (2) academic librarians must utilize instructional and communications technologies to extend their services to distant students; and (3) information support staff, faculty development personnel, and librarians must work with teaching faculty to ensure that they understand the limitations of the distance technologies they employ to extend their classrooms. The University of Nebraska-Lincoln has addressed these challenges by establishing a coordinator position within the libraries to provide oversight for services to distant learners. The primary aspects of library operations that the coordinator facilitates for distant learners are access to electronic resources, provision of liaison services, and timely delivery of materials. Access to the library's online public access catalog, bibliographic databases, full text databases, reference works, electronic journals, and a classified catalog of Internet resources is provided through an Integrated Research Information System. Liaison librarians offer instructional support for remote students. Materials are requested electronically and delivered directly to students' homes. (DLS)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

Supporting Distance Learners and Academic Faculty Teaching at a Distance

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☑ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

Kate Adams, Associate Professor
University of Nebraska-Lincoln

Tracy Bicknell-Holmes, Associate Professor
University of Nebraska-Lincoln

Gail F. Latta, Associate Professor
University of Nebraska-Lincoln

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
C.H. Olgren
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

ED 422 836

The curriculum in higher education has, with good reason, traditionally emphasized *both* the mastery of concepts and skills through directed learning in controlled environments, and the application of this knowledge through independent study in information-rich contexts beyond the classroom and laboratory. Mastery of discipline-specific knowledge and skills has been fostered through lecture and active learning in the classroom, assigned readings, and carefully constructed exercises. These directed learning experiences ensure that students achieve a desired level of understanding and fluency with basic concepts and skills. The application of this knowledge has been shaped through assignments that challenge students to utilize the rich scholarly resources available to them through the academic library. Here students learn to apply newly acquired knowledge and skills within the interdisciplinary and information-rich environment of scholarly research, to extract relevant information and construct novel solutions to disciplinary problems utilizing the latest research findings. In the distance learning environment, the challenge for educators is to utilize available technologies to engage students in both mastery of course content through directed learning, and the independent application and construction of knowledge required of lifelong learners.

Many distant learning technologies are being effectively utilized in higher education to promote the acquisition of knowledge and skills: Satellite delivery and video streaming allow transmission of classroom lecture; email and chat room technologies support asynchronous and synchronous modes of discussion and group work; CD-ROM and Web-based multimedia delivery platforms permit the development of visually rich tutorials that foster fluency in the understanding of basic concepts and the application of skills through discovery learning in controlled or simulated environments. Digital image and full-text document collections give students access to selected readings and course-related materials selected by the instructor to enrich students' learning. Together, these technologies permit varied and effective approaches to fostering mastery of core concepts, the acquisition of specialized skills, and the application of these in controlled, largely static environments.

But distant students, like resident students, need opportunities to engage in *independent learning* activities utilizing dynamic collections of scholarly resources. It is in this environment that students learn to apply the knowledge and skills acquired through *directed learning* to extract relevant information from a dynamic knowledge base, discover new levels of meaning, and construct novel solutions to disciplinary problems utilizing the latest research findings. In addition, they acquire the skills of information access, retrieval and evaluation necessary to sustain lifelong learning. If distant learners are not afforded the opportunities and challenges of independent learning through access to the collections and

IR018977

services of academic libraries, their educational experiences will be incomplete. There are three challenges academic institutions must address in order to achieve the goal of ensuring that distant students are afforded the opportunities of independent learning all students of higher education deserve:

First, academic libraries must effectively utilize technology to make the rich information resources in their research collections accessible to distant students. Bibliographic and fulltext databases must be available for students to search remotely. These should provide a variety of retrieval methods and browsing capabilities to simulate the experience of actually being in the library: i.e. browsing shelf location or the tables of contents of recently published journals. Provisions must be made to deliver books and other print-based resources to distant students in a timely manner. Copies of journal articles and other documents that do not circulate must be made available as well, either digitally or through document delivery. Archival, microform, or special collections materials, when needed by distant students, may require special handling or alternative access policies.

Second, academic librarians must utilize instructional and communications technologies to extend their services to distant students. Distant students, no less than on-campus users, will require the services of reference librarians for consultation and instruction in selecting appropriate databases and resources, as well as for assistance locating specific information. Additional assistance will be required for these students when no remotely accessible resource is available to meet the student's information needs. Circulation and document delivery services need to be tailored to the needs of distant students, to ensure they have timely access to materials in the collection. The challenge of providing distant services to remote students will require unique attention to ensure that students are acquiring the skills necessary to become independent learners and not simply asking librarians to exercise these skills on their behalf.

Finally, information support staff, faculty development personnel, and librarians must work with teaching faculty to ensure that they understand the limitations of the distance technologies they employ to extend their classrooms. In particular, teaching faculty must understand the importance of complementing their technology-enriched curriculum with assignments that require distant students to exercise independent learning skills in the information-rich environment of the academic library. The numerous technological tools now at the disposal of the distance educator allow faculty to provide students with many effective alternatives for delivering instruction and fostering learning: Readings may be digitized, lectures beamed via satellite or videostreamed across the Internet; synchronous communication via chat rooms and teleconferencing allows for effective group work among students separated by distance, while asynchronous communication fosters more reflective dialogue about issues than traditional classroom discussion typically elicits. The graphically rich environment of the Web generally allows a more holistic approach to learning. Faculty teaching with these technologies may find it easy to overlook the limitations of these tools.

Faculty teaching at a distance must continually be challenged to find ways of ensuring the transfer of knowledge beyond their controlled multimedia learning environments, to the more ambiguous information world in which graduates will be expected to apply what they have learned. In order to continue learning, students need to know how information is organized and accessed beyond the confines of their curriculum. For example, students who only learn to exercise information retrieval skills in the restricted environment of a digitized

selection of articles on a CD-ROM, will not be adequately prepared to transfer these skills to the dynamic, open-ended environment of large, disciplinary databases. One of the hallmarks of higher education is that students learn to extend their learning beyond the curriculum to recognize novel applications and discover new relevant knowledge. Information providers believe that "access to adequate library services and resources is essential for the attainment of superior academic skills in post-secondary education, regardless of where students, faculty, and programs are located" (Association of College and Research Libraries, 1998). Discovery learning requires an environment that contains elements of the unknown, and all students, including distant learners, deserve a full level of academic library services as they pursue mastery of course content and practice the skills of independent learning. Information providers, working together with teaching faculty, can find effective ways of achieving these goals.

Meeting the Challenge of Independent Learning

At the University of Nebraska-Lincoln (UNL), we have addressed these challenges by establishing a coordinator position within the libraries to provide oversight for services to distant learners. This coordinator is responsible for communicating both inside the library, with those who provide services and resources to distant learners, and outside the library, with other service units, as well as with faculty who provide instruction using distance technologies. The coordinator monitors all aspects of library service and policies to determine what special provisions are necessary to ensure equality of access by distant learners. She works with the Division of Continuing Studies to identify the needs of distant learners, and strategies for communicating library services to these populations. By representing the needs of distant learners within the libraries, the coordinator ensures that policies and services take into account the special requirements of these students. Prior to the start of each semester, the coordinator contacts faculty slated to offer courses via distance delivery, and educates them regarding the library's support of distant learners. She urges these professors to work with their liaison librarians (whom she also contacts) to identify strategies for incorporating library instruction and research assignments into their curriculum. In these ways, the Coordinator for Distance Education ensures that at UNL, distant learners have access to full library services and resources, so that curricular needs are met, and independent exploration and individual research are supported.

There are three primary aspects of library operations which the coordinator facilitates for distant learners: Access to electronic resources, provision of liaison services, and timely delivery of materials.

Remote access to electronic resources is the cornerstone of library service to distant learners. An Integrated Research Information System (IRIS) provides access to the library's online public access catalog, a full array of scholarly bibliographic databases, a selection of full text databases, reference works, and electronic journals, as well as a classified catalog of Internet resources organized by subject discipline. While each electronic resource features its own user interface, many possess features particularly geared to the needs of the distant learner. For example, the online catalog features a browse function that permits remote students to switch from a subject or known-item search to an examination of adjacent items by shelf location, just as if the students were browsing the stacks. A similar feature of the UnCover journal index allows remote users to examine the tables of contents of recently published journals, in much the same way an onsite user would browse the current periodicals reading

room. Another feature of the UnCover database allows students to request notification via email when new items of interest are entered into the database. Fulltext reference works accessible through IRIS include the encyclopedias Britannica and Americana, and the Mental Measurements Yearbook. A growing number of fulltext journals are also available through the Expanded Academic Index, Business & Company Profiles, and JSTOR. Fulltext items may either be viewed on screen or printed/downloaded at the users' site. Although publisher practice varies, the number of electronic journals being made available fulltext continues to increase slowly. Finally, the UNL Libraries' Internet Resources Catalog provides a classified collection of Internet-accessible resources selected for their scholarly content, authority, currency, stability and creativity. The collection includes full descriptive cataloging which may be searched by keyword.

The second major component of library services to distant learners is consultation with appropriate subject liaison librarians. Liaison librarians have subject expertise acquired through graduate degrees and research, and their work combines personal contact with professional expertise. At many academic institutions, as well as at UNL, liaison librarians work closely with academic departments. Distant learners require research assistance from knowledgeable subject liaisons no less than onsite students. Through instruction and one-on-one consultation, these librarians help remote students master many aspects of the research process:

- ❖ Developing appropriate search strategies
- ❖ Identifying resources for a topic
- ❖ Evaluating resources for authority and scholarly value

Liaison librarians provide instructional support for remote students in the use of both electronic and print resources. This instruction may be provided to entire classes using distance delivery techniques, or one-on-one via email, telephone or fax. Small group consultation is also supported. Faculty who teach via satellite regularly invite liaison librarians to present instruction; online search skills for the Internet, library catalog, or subject-specific databases may be covered in these interactive sessions. For classes taught via asynchronous technologies, library instruction is delivered on videotape. Communication between liaison librarians and distant learners may be further facilitated if teaching faculty include the appropriate subject liaison in a class listserv or email distribution list. Specialized reference queries may be sent directly to the subject liaison librarian for in-depth assistance, while less specialized reference questions may be posted to a general electronic reference email account. Reference staff monitor these accounts and provide timely responses. Providing reference assistance at a distance is the newest challenge for academic reference librarians. The goal, as for on-site students, is still to enable distant learners to learn the skills of information retrieval, but teaching these skills at a distance requires new techniques and creativity.

Effective and timely materials delivery is the third key component of library service to distant learners. This is particularly critical for distant students residing in locations where they have no access to a library of research quality. In Nebraska, UNL houses the only comprehensive research library in the state, so we have paid particular attention to our delivery services. Once identified through remote access to the library's databases, materials may be requested electronically by email, web, fax or mail. Requests may be placed for items that are in our collections, or that must be borrowed from other libraries. Books are delivered directly to students' homes by U.S. postal service; students are responsible for

return postage. Journal articles are delivered by mail or fax, with charges being absorbed by the library. An electronic reserve service, accessed through the IRIS system, allows students to retrieve materials placed on reserve by faculty.

Distant students receive a variety of handouts before the start of their class, describing these library resources and services. A Webpage has recently been established to provide additional information and assistance to the remote student trying to access library resources and services. This webpage provides links to existing library and university services relevant to distant students. Enhancements to the Website are envisioned that will incorporate more interactivity and multimedia applications.

Future Directions

There are many opportunities for enhancing library services to distant learners in the future. In the area of access, we are still waiting for technology to catch up with our vision. For example, while we currently offer access to a select number of fulltext resources, printing and downloading of this information often proves to be problematic for the remote user. Meanwhile, information providers must continue efforts to work with publishers and professional organizations to resolve issues pertaining to the protection of copyright and intellectual property in the storage, retrieval and dissemination of digital media. Advances in network security are needed to ensure that copyrighted material posted on the Internet can be protected from unauthorized access.

In the area of service, we are striving toward an environment where multimedia instruction will be available to distant learners via the Web. Tutorials providing 24-hour, point-of-need instruction will guide students through the intricacies of conducting independent research, accessing appropriate subject-specific resources, developing search strategies, and evaluating results. These information literacy skills are the foundation of a literate society, and information providers seek innovative ways of effectively transmitting these skills to distant learners. In addition, we must develop creative approaches to liaison service, making use of synchronous as well as asynchronous communication technologies to provide reference and consultation. We will also continue to seek opportunities to collaborate with teaching faculty to design meaningful independent learning assignments that will further students' understanding of course content, while extrapolating it to the information-rich and dynamic environment beyond the classroom.

Delivery of materials will continue to be a challenge in order that knowledge contained in print-based media are available to the next generation of scholars. This may mean digitizing documents on demand for delivery via the Internet or fax. As distance learning technologies advance, novel solutions will be required to ensure equitable service to both distant and on-campus learners. As the community of information providers and distance educators has found, "effective and appropriate services for distance learning communities may differ from, but must be equivalent to, those services offered on a traditional campus" (Association of College and Research Libraries, 1998). And as academic libraries enrich their collections with increasingly diverse electronic resources, consideration will need to be given to how these products will benefit students both at a distance and on campus.

Reference

Association of College and Research Libraries (1998). *Guidelines for Distance Learning Library Services.* (http://www.lib.usf.edu/~ifrank/distance/guiposfd.html)

Autobiographical Sketches

Kate Adams, Associate Professor, is Chair of General Services Department for the University Libraries at the University of Nebraska-Lincoln. She also serves as the Libraries' Distance Education Coordinator. Her previous professional experience includes seven years as a reference librarian. She holds a Master of Arts in Library Science from the University of Wisconsin-Madison.

Address: 225B Don L. Love Library
University of Nebraska-Lincoln
Lincoln, NE 68588-0410
Email: katea@unllib.unl.edu
URL: iris.unl.edu
Phone: (402) 472-2522
Fax: (402) 472-5131

Tracy Bicknell-Holmes is an Associate Professor and Business Liaison Librarian at the University of Nebraska-Lincoln. She earned her Masters of Science in Library and Information Science from the University of Illinois and her Masters in Business Administration from UNL. As a member of the Libraries' Research & Development Team for Instructional Technologies, she has been working to integrate multimedia into instruction at UNL.

Address: 219N Don L. Love Library
University of Nebraska-Lincoln
Lincoln, NE 68588-0410
Email: tracyb@unllib.unl.edu
URL: iris.unl.edu
Phone: (402) 472-2554
Fax: (402) 472-5131

Gail F. Latta is an Associate Professor and Leader of the Research & Development Team for Instructional Technologies at the University of Nebraska-Lincoln Libraries. She is also a Faculty Associate for the Teaching and Learning Center, where she coordinates a campus-wide faculty development series on innovative applications of technology to instruction. She holds a B.S. in Psychology from the University of Texas at Arlington, and a Masters of Library Science from Texas Woman's University.

Address: 203 Don L. Love Library
University of Nebraska-Lincoln
Lincoln, NE 68588-0410
Email: glatta@unl.edu
URL: iris.unl.edu
Phone: (402) 472-2521
Fax: (402) 472-5131